WHAT IS CLAIMED IS:

1. A method of manufacturing an amorphous alloy core comprising the steps of:

mixing an amorphous alloy powder with a solution made by dissolving a polyimide/phenolic resin binder in an organic solvent, evenly coating the binder in liquid phase on the surface of the alloy powder to make a powder of composite particles;

molding the power of composite particles; and

performing a heating treatment thereon.

2. A method according to claim 1, wherein the amorphous alloy powder is selected from the group consisting of Fe-Si-B based alloys, Fe-Al-B based alloys, and Co-Fe-Si-B based alloys.

3. A method according to claim 1, wherein the amount of the binder is 0.5 to 3.0 wt% of the total mass.

4. A method according to claim 1, wherein the molding is performed at from about room temperature to about 200°C under a pressure of 10 to 50 ton/cm^2.

5. A method according to claim 1, wherein the heating treatment is performed at 150 to 500°C.

6. A method according to claim 1, further comprising the step of performing a heating treatment on the amorphous alloy powder at less than 500°C before mixing the amorphous alloy powder in the solution made by dissolving the polyimide resin or phenolic resin in the organic solvent.

7. An amorphous alloy core having a saturated magnetic flux density of more than 0.80T and a permeability of more than 0.90, measured in 1MHz and 0.1MHz.

8. An amorphous alloy core according to claim 7, wherein the amorphous alloy core is made by evenly coating a polyimide-based or phenol-based binder on an amorphous alloy powder, and performing a compression molding at less than 200°C.

9. A method of manufacturing a nano-crystal alloy core comprising the steps of:

mixing an amorphous alloy powder with a solution made by dissolving a polyimide/phenolic resin binder in an organic solvent, evenly coating the binder in liquid phase on the surface of the alloy powder to make a powder of composite particles;

molding the power of composite particles at room temperature; and

performing a heating treatment thereon at over a crystallization starting temperature.

10. A method according to claim 9, wherein the amorphous alloy powder is selected from the group consisting of Fe-Si-B based alloys and Fe-Al-B based alloys.

11. A method according to claim 9, wherein the heating treatment is performed at less than 100°C higher than the crystallization starting temperature of said amorphous alloy.

12. A method of manufacturing a nano-crystal alloy core comprising:

performing a heating treatment on an amorphous alloy powder at over a crystallization starting temperature to make a nano-crystal phase, mixing a solution made by dissolving a polyimide/phenolic resin binder in an organic solvent therewith, evenly coating the binder in liquid phase on the surface of the alloy powder to make a powder of composite particles; and

molding the power of composite particles at 100 to 300°C.

13. A method according to claim 12, wherein the amorphous alloy powder is selected from the group consisting of Fe-Si-B based alloys and Fe-Al-B based alloys.

14. A method according to claim 12, wherein the heating treatment is performed at less than 100°C higher than the crystallization starting temperature of said amorphous alloy.

15. A nano-crystal alloy core having a saturated magnetic flux density of more than 1.10T and a permeability of more than 0.90, measured in 1MHz and 0.1MHz.

16. A method of manufacturing an amorphous alloy core or nano-crystal alloy core by mixing an alloy powder with a solution made by dissolving a resin selected from the group consisting of a polyimide resin and a phenolic resin in an organic solvent.